Commonwealth of Kentucky
Division for Air Quality

STATEMENT OF BASIS / SUMMARY

Title V, Operating
Permit: V-21-008
Holley Performance Products, Inc.
1801 Russellville Road
Bowling Green, Kentucky 42102
4/28/2021
Eric Amdahl, Reviewer

SOURCE ID:	21-227-00008
AGENCY INTEREST:	4116
ACTIVITY:	APE20200001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 3714, Motor Vehicle Parts and Accessories

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☒ Yes ☐ No If Yes, See Section 4, Table A

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Warren
Nonattainment Area ☒ N/A ☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☒ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☒ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☐ Yes ☒ No

PTE* greater than 25 tpy for combined HAP ☐ Yes ☒ No

*PTE does not include self-imposed emission limitations.

Description of Facility:
Holley Performance Products (Holley) is a final machining and assembly facility for automotive engine components, with a major focus on carburetors and fuel pumps. Partially finished parts and raw materials are received at the Bowling Green, Kentucky facility, where they undergo final machining, cleaning, chemical drying, polishing, assembly, quality control testing, packaging for shipment and storage.

Holley also manufactures small automotive parts and rebuilds carburetors. Carburetors are received, disassembled, cleaned, repaired, reassembled, and quality control tested before shipping to customers.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: V-21-008 Activities: APE20200001

Received: August 28, 2020 Application Complete Date(s): October 23, 2020

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☐ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐Yes ☒No NSR Applicable? ☐Yes ☒No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☐Yes ☒No

Description of Action:
Holley performance products submitted an application for a permit renewal on August 28, 2020. The source submitted additional information on March 19, 2021. As a result, the following changes have been made to Section B – Emission Points, Emission Units, Applicable Regulations, and Operating Conditions:

- The number of carburetor test stands has been changed from 29 to 15 for EP 01(17).
- EP 06(12, 13, 14, & 15) – Plating Operations, has been removed from the permit, because the emission points have been removed from the facility. This unit was the primary source of Chromium VI emissions. Therefore, the Chromium VI (particulate including acid mist) emission limit in Section D of the permit has also been removed because the facility no longer has the potential to emit greater than 0.0003901 tpy of Chromium VI. Remaining Chromium emissions passed screening in SCREENView.

The following changes have been made to the Section C – Insignificant Activities.

- The following Insignificant Activities (IA) listed in permit V-15-008 have been removed from the permit because they have either been removed from the facility or they have been disconnected and disassembled in such a way that they cannot be used again.
    - IA #1 Boiler #1
    - IA #4 Thermal deburring units with cyclone
    - IA #10 Three Glass Bead
    - IA #19 Test Stands (1-16)
    - IA #23 Welding Electrode 308LT 3 MIG (GMAW), 2 TIG (SMAW) with two portable mist collectors
- The description for I.A. #10 has been updated to “Silver Soldering/Brazing Line” from “Silver Soldering Line”
- The number of Torex Polishers has been increased from 5 to 6 for IA #4.

The facility is still a Title V major source of VOC emissions and is limited to 240 tons/year to preclude 401 KAR 51:017, Prevention of Significant Deterioration. The source requested that EP 05(18(a, b, and f)) be removed from Section B and moved to Section C, however, the units are subject to 401 KAR 59:185, which is not a “generally applicable regulation”, and therefore must continue to be included in Section B of the permit.

On April 23, 2021, the facility provided updated information regarding the cold cleaners and the solvent used. The emission calculations have been updated accordingly.

V-21-008 Emission Summary		
Pollutant	2019 Actual (tpy)	PTE V-21-008 (tpy)
CO	0.356	1.45
NO_X	0.428	2.21
PT	1.660	16.21
PM_{10}	1.66	16.30
$PM_{2.5}$	1.65	15.44
SO_2	0.00326	0.014
VOC	110.5	240[2]
Lead	0.0000158	0.00415
Greenhouse Gases (GHGs)		
Carbon Dioxide	495.6	1948
Methane	0.00950	0.19
Nitrous Oxide	0.00909	0.004
CO_2 Equivalent (CO_2e)	498.6	1954
Hazardous Air Pollutants (HAPs)		
Toluene[1]	1.52	0.0085
Trimethyl Benzene	0.78	5.26[2]
2,2,4-Trimethylpentane	0.626	3.76[2]
Combined HAPs:	3.97	9.06

1. Potential Toluene emissions are less than the actual emissions reported in 2019 because the primary source of those emissions, EP 06(12, 13, 14, & 15), has been removed.
2. Limited by enforceable emission limitations in the permit.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Point 01 (17) – Carburetor Test Stands & Master-Flow Test Stands				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
1,2,4-Trimethyl benzene	3.76 tons/yr	401 KAR 63:020	0.1953 lb/gallons, MSDS	Monitor and maintain records of process materials added & calculate the rolling 12-month total emissions

Initial Construction Dates: 7 Test Stands in 1990 & 10 Test Stands in December 2003.

Process Description:
Holley Built Test Stands are used to test new and reconditioned carburetors. Incidental testing is conducted throughout the facility on carburetors and other parts using H.P. 917 (1,2,4-Trimethylbenzene) and mineral spirits. All the test stands are vented to a single stack.
Maximum Annual Capacity: 306.6 tons/year of research solvent; 1752 gallons/year of mineral spirits
Maximum Rated Output Capacity: 140 pieces/hour
Control Equipment: None

State-Origin Requirements:
401 KAR 63:020, *Potentially hazardous matter or toxic substances.* Applies to 1,2,4-trimethylbenzene emissions.

Precluded Regulations:
401 KAR 51:017, *Prevention of significant deterioration*

Comments:
The emission factors were calculated using a MSDS for H.P. 917.

Emission Point 03(11) – Iso-Octane Fuel flow Testing				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
2,2,4-Trimethyl pentane	1.9 lbs/hr & 3.8 tons/yr	401 KAR 63:021	1996 lb/tons, MSDS	Monitor and maintain records of process materials added & calculate the rolling 12-month total emissions

Initial Construction Date: 1981

Process Description:
Two Holley Design and Build units having a constant flow of Iso-octane (2,2,4-Trimethylpentane) and Toluene that perform Quality Assurance/Quality Control testing on various products.
Maximum Annual Capacity: 8.4069 tons/year
Control Equipment: None

Emission Point 03(11) – Iso-Octane Fuel flow Testing

State-Origin Requirements:
401 KAR 63:020, *Potentially hazardous matter or toxic substances,* Applies to toluene emissions.
401 KAR 63:021, *Existing sources emitting toxic air pollutants,* Applies to 2,2,4-trimethylpentane emissions.

Precluded Regulations:
401 KAR 51:017, *Prevention of significant deterioration*

Comments:
The emission factors were determined using the SDS for Iso-octance and toluene.

Emission Point 05[18(a, b, and f)] – Cold Cleaners

Initial Construction Date: 03/2004

Process Description:
Cold cleaning units using Armakleen 4-in-1 (10% concentrate cleaner) to clean casting parts, or completed carburetors.
Maximum Capacity: 1,561 gallons/yr
Control Equipment: None

EP #	Process Description
18(a)	One cold cleaner unit utilizes a stream of solvent Armakleen to clean incoming parts to be reconditioned. Cold cleaner emissions exhaust through one stack.
18(b)	One cold cleaner unit is used in the maintenance shop. It utilizes a pump to flow solvent Carburetor Cleaner through a brush to clean parts. This unit has no exhaust.
18(f)	One cold cleaner unit.

Applicable Regulation:
401 KAR 59:185, *New solvent metal cleaning equipment.*

Precluded Regulations:
401 KAR 51:017, *Prevention of significant deterioration*

Comments:
The emission factors were provided by the SDS for Armakleen 4-in-1.

Emission Point 25 – 1,000 Gallon Gasoline Storage Tank – Gasoline Storage and Dispensing

Initial Construction Date: 2004

Process Description:
Gasoline is supplied by this tank exclusively to the Dynamometers. Holley does not dispense gasoline from this tank into any motor vehicle, road or non-road.
Control Equipment: None

Applicable Regulation:
401 KAR 63:002, Section 2(4)(ddddd), 40 C.F.R. 63.11110 to 63.11132, Tables 1 to 3 (Subpart CCCCCC), *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.* Applies to each gas dispensing facility located at an area source.

Comments:
The emission factors for the gasoline storage tank were determined in previous permitting actions using AP-42 Chapter 7: Liquid Storage Tanks. The compliance date for this emission point was January 24, 2014 [40 CFR 63.11113(f)(1)].

Emission Point 07 – Existing Emergency Engine

Initial Construction Date: 07/2005

Process Description:
One emergency engine to provide back-up power in case of a power loss or provide water in case of a fire.
Manufacturer: Caterpillar Olympian G30F3 (SI) Engine Set with Ford Natural Gas Powered V6 Engine.
Maximum Rating: 97 HP
Engine Family: 4 Stroke Lean Burn
Control Equipment: None

Applicable Regulation:
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.* Applies to any existing stationary RICE located at an area source of HAP emissions.

Note: D.C. Circuit Court [Delaware v. EPA, 785 F. 3d 1 (D.C. Cir. 2015)] has vacated the provisions in 40 CFR 63, Subpart ZZZZ that contains the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 63.6640(f)(2)(ii)-(iii). The D.C. Circuit Court issued the mandate for the vacatur on May 4, 2016.

Precluded Regulations:
401 KAR 51:017, *Prevention of significant deterioration*

Comments:
The emission factors for existing emergency engines are sourced from AP-42 Table 3.2-2, uncontrolled emission factors for 4-stroke lean burn engines.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing

Footnotes:
EP 06(12, 13, 14, & 15) are the only units that required testing every five years. However, these emission points were removed from the facility and the permit, and no other testing has been performed at this facility.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Point
240 tpy of VOC emissions	To preclude 401 KAR 51:017, PSD	Facility Wide

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Point
401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.	EP 01(17), EP 03(11)]
401 KAR 59:185, *New metal cleaning equipment.* Applies to each cold cleaners that utilize VOCs to remove soluble impurities from metal surfaces which commenced operation on or after June 29, 1979.	EP 05 [18(a, b, and f),
401 KAR 63:021, *Existing sources emitting toxic air pollutants*, applies to 2,2,4-Trimethylpentane	EP 03(11)
401 KAR 63:002, Section2(4)(ddddd), 40 C.F.R. 63.11110 to 63.11132, Tables 1 to 3 (Subpart CCCCCC), *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.* Applies to each gas dispensing facility located at an area source.	EP 25
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.* Applies to any existing stationary RICE located at an area source of HAP emissions.	EP 07

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Point
401 KAR 51:017, *Prevention of significant deterioration of air quality,* Precluded by limiting VOC emissions to 240 tpy.	Facility Wide

Table D - Summary of Non Applicable Regulations:
N/A

Air Toxic Analysis
401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*
The Division for Air Quality (Division) has performed SCREEN View on March 31, 2021 of potentially hazardous matter or toxic substances (Trimethyl Benzene, Chromium, and Toluene) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

Single Source Determination
N/A

SECTION 5 – PERMITTING HISTORY

Permit	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
O-89-076 R1	Operating Permit	File # 105-3960-008	7/7/1998	7/13/1998	Permit Revision for Holley Performance Products	N/A
V-03-053	Initial Issuance	Log # 50716	11/26/2003	3/12/2004	Initial Title V Permit	Syn Minor
V-03-053 R1	Minor Revision	APE20040002	10/3/2005	12/22/2005	Changes to EP 05, 06, and the list of IA	N/A
V-03-053 R2	Minor Revision	APE20060001	1/9/2006	2/15/2006	EU 04 Removed, Changes to EU 05, 06(13), 06(15)	N/A
V-03-053 R3	Minor Revision	APE20080001	6/12/2008	11/18/2008	Changes to adjamatic, dye, and brass cleaning lines, and changes to the list of IA	N/A
V-09-007	Renewal	APE20080002	10/9/2009	5/21/2010	Renewal	N/A
V-09-007 R1	Minor Revision	APE20110002	2/3/2012	6/6/2012	Reduction in Chromium VI; Addition of 40 CFR 63, Subpart CCCCCC	N/A
V-09-007 R2	Minor Revision	APE20120001	10/23/2012	1/13/2013	Changes to 401 KAR 63:020 limits & plating lines	N/A
V-15-008	Renewal	APE20140002	8/31/15	2/29/2016	Changes to IAs, Section B	N/A

SECTION 6 – PERMIT APPLICATION HISTORY

N/A

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS – Ambient Air Quality Standards
BACT – Best Available Control Technology
Btu – British thermal unit
CAM – Compliance Assurance Monitoring
CO – Carbon Monoxide
Division – Kentucky Division for Air Quality
ESP – Electrostatic Precipitator
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HF – Hydrogen Fluoride (Gaseous)
MSDS – Material Safety Data Sheets
mmHg – Millimeter of mercury column height
NAAQS – National Ambient Air Quality Standards
NESHAP – National Emissions Standards for Hazardous Air Pollutants
NO_x – Nitrogen Oxides
NSR – New Source Review
PM – Particulate Matter
PM_{10} – Particulate Matter equal to or smaller than 10 micrometers
$PM_{2.5}$ – Particulate Matter equal to or smaller than 2.5 micrometers
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit
SO_2 – Sulfur Dioxide
TF – Total Fluoride (Particulate & Gaseous)
VOC – Volatile Organic Compounds